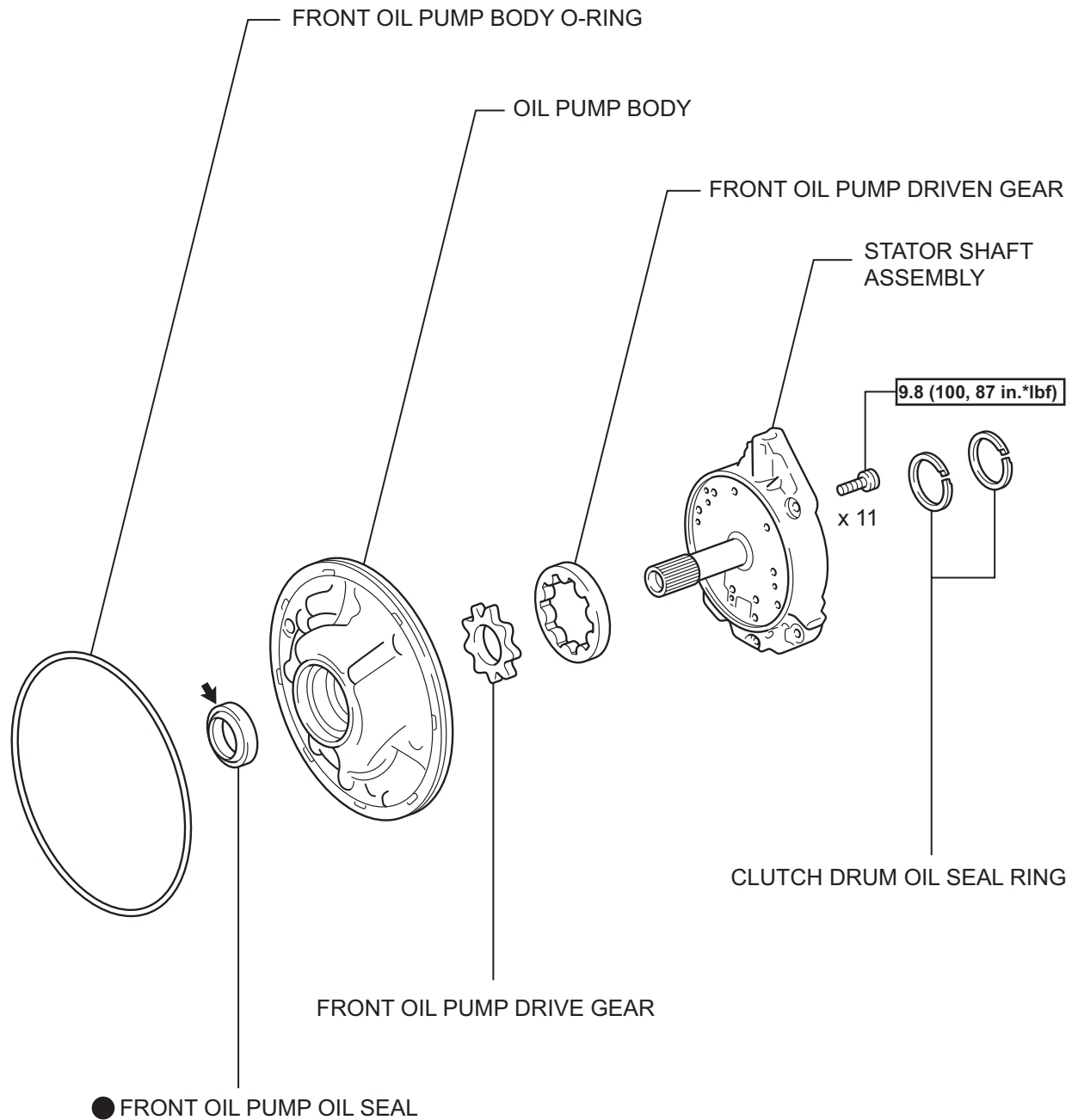


# OIL PUMP

## COMPONENTS

AX



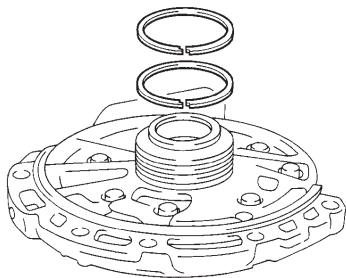
$\boxed{\text{N}\cdot\text{m (kgf}\cdot\text{cm, ft.}\cdot\text{lbf)}}$  : Specified torque

● Non-reusable part

← Apply MP grease

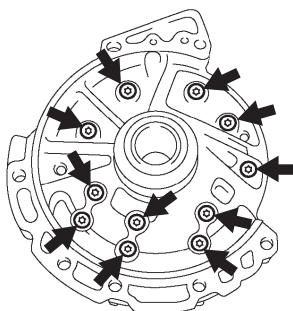
## DISASSEMBLY

1. **INSPECT OIL PUMP ASSEMBLY** (See page [AX-247](#))
2. **REMOVE CLUTCH DRUM OIL SEAL RING**
  - (a) Remove the 2 clutch drum oil seal rings.



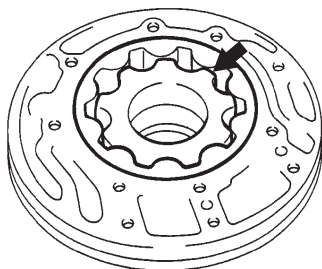
D003650E02

3. **REMOVE STATOR SHAFT ASSEMBLY**
  - (a) Using a T30 "torx" socket, remove the 11 bolts and stator shaft.
4. **INSPECT CLEARANCE OF OIL PUMP ASSEMBLY** (See page [AX-247](#))



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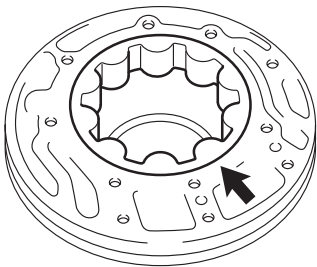
5. **REMOVE FRONT OIL PUMP DRIVE GEAR**



N

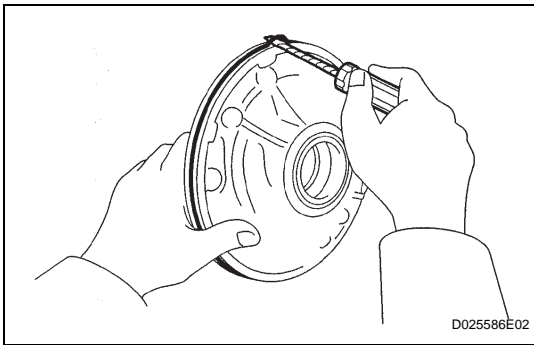
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6. **REMOVE FRONT OIL PUMP DRIVEN GEAR**



N

C119012

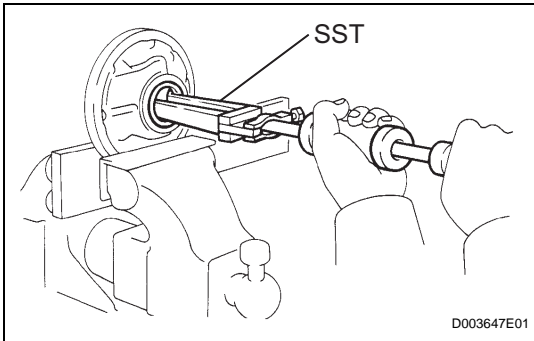


## 7. REMOVE FRONT OIL PUMP BODY O-RING

- (a) Using a screwdriver, pry out the O-ring.

HINT:

Tape the screwdriver tip before use.

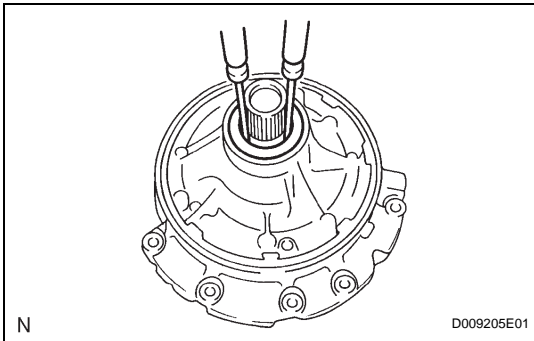


## 8. REMOVE FRONT OIL PUMP OIL SEAL

- (a) Mount the oil pump in a soft jaw vise.

- (b) Using SST, remove the oil seal from the oil pump body.

**SST 09308-00010**



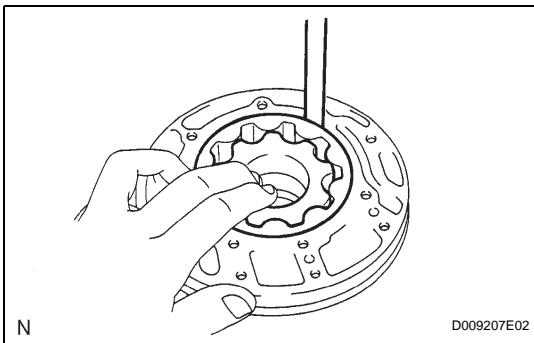
## INSPECTION

### 1. INSPECT OIL PUMP ASSEMBLY

- (a) Turn the drive gear with 2 screwdrivers and make sure that it rotates smoothly.

**NOTICE:**

**Be careful not to damage the lip of the oil seal.**



### 2. INSPECT CLEARANCE OF OIL PUMP ASSEMBLY

- (a) Push the driven gear to one side of the body.
- (b) Using a feeler gauge, measure the body clearance between the driven gear and oil pump body.

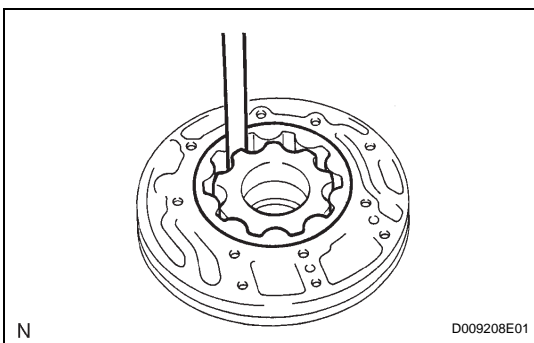
**Standard body clearance:**

**0.10 to 0.17 mm (0.0039 to 0.0067 in.)**

**Maximum body clearance:**

**0.17 mm (0.0067 in.)**

If the body clearance is greater than the maximum, replace the oil pump body sub-assembly.



- (c) Using a feeler gauge, measure the tip clearance between the driven gear teeth and drive gear teeth.

**Standard tip clearance:**

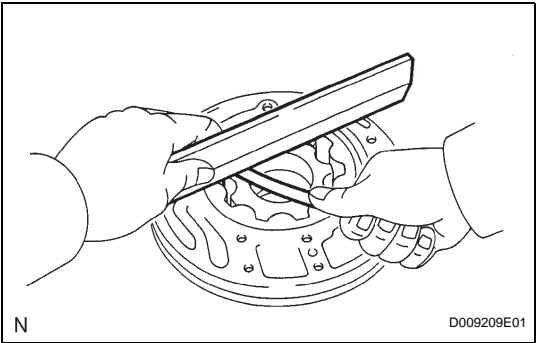
**0.07 to 0.15 mm (0.0028 to 0.0059 in.)**

**Maximum tip clearance:**

**0.15 mm (0.0059 in.)**

If the tip clearance is greater than the maximum, replace the oil pump body.

AX



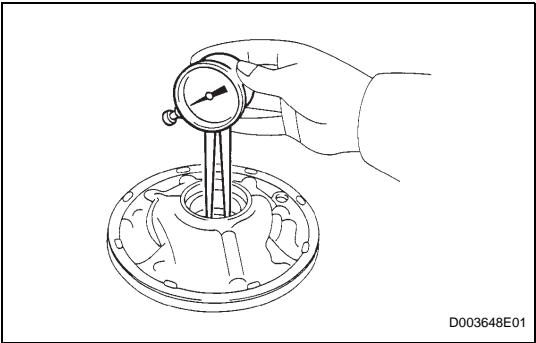
- (d) Using a straightedge and feeler gauge, measure the side clearance of both gears.

**Standard side clearance:**  
**0.02 to 0.05 mm (0.0008 to 0.0020 in.)**  
**Maximum side clearance:**  
**0.05 mm (0.0020 in.)**  
**Standard drive gear thickness**

Mark	Thickness
A	11.690 to 11.699 mm (0.4602 to 0.4606 in.)
B	11.700 to 11.709 mm (0.4606 to 0.4610 in.)
C	11.710 to 11.720 mm (0.4610 to 0.4614 in.)
D	11.721 to 11.730 mm (0.4615 to 0.4618 in.)
E	11.731 to 11.740 mm (0.4619 to 0.4622 in.)

**Standard driven gear thickness**

Mark	Thickness
A	11.690 to 11.699 mm (0.4602 to 0.4606 in.)
B	11.700 to 11.709 mm (0.4606 to 0.4610 in.)
C	11.710 to 11.720 mm (0.4610 to 0.4614 in.)
D	11.721 to 11.730 mm (0.4615 to 0.4618 in.)
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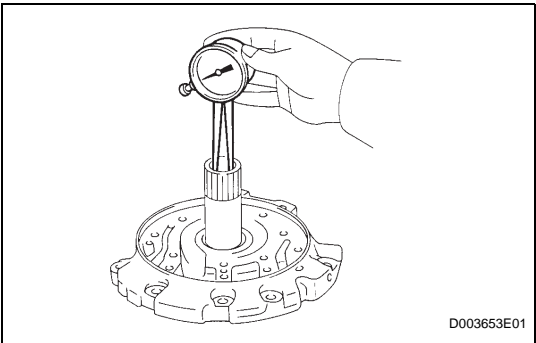


**3. INSPECT FRONT OIL PUMP AND GEAR BODY SUB-ASSEMBLY**

- (a) Using a caliper gauge, measure the inside diameter of the oil pump body bushing.

**Standard inside diameter:**  
**38.113 to 38.138 mm (1.5005 to 1.5015 in.)**  
**Maximum inside diameter:**  
**38.188 mm (1.5035 in.)**

If the inside diameter is greater than the maximum, replace the oil pump body sub-assembly.

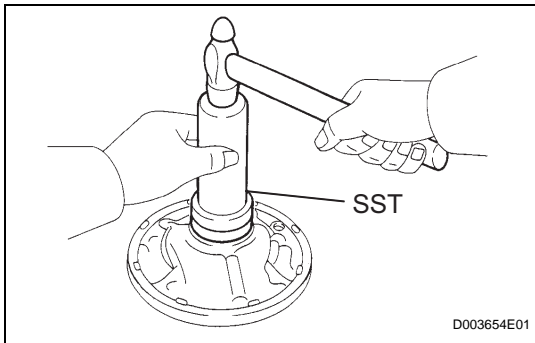


**4. INSPECT STATOR SHAFT ASSEMBLY**

- (a) Using a caliper gauge, measure the inside diameter of the stator shaft.

**Standard inside diameter:**  
**21.500 to 21.526 mm (0.8465 to 0.8475 in.)**  
**Maximum inside diameter:**  
**21.57 mm (0.8492 in.)**

If the inside diameter is greater than the maximum, replace the stator shaft.



## REASSEMBLY

### 1. INSTALL FRONT OIL PUMP OIL SEAL

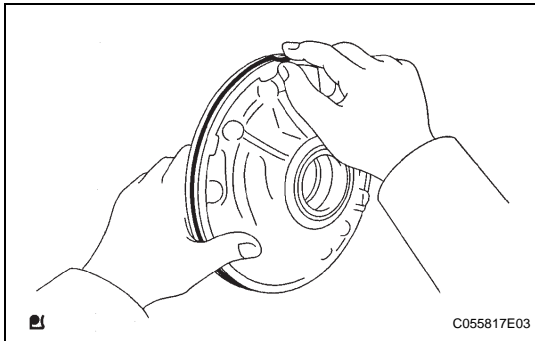
- (a) Using SST and a hammer, tap in a new oil seal to the oil pump body.

**SST 09350-32014 (09351-32140)**

**HINT:**

The seal end should be flat with the outer edge of the oil pump.

- (b) Coat the lip of the oil seal with MP grease.

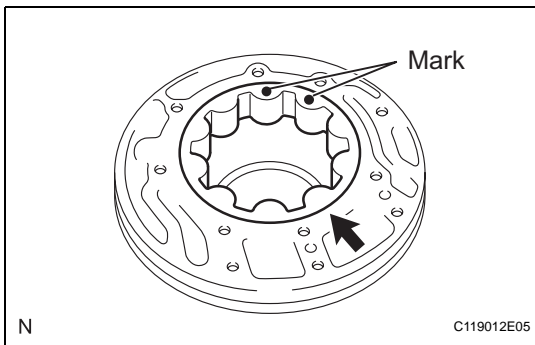


### 2. INSTALL FRONT OIL PUMP BODY O-RING

- (a) Coat a new O-ring with ATF, and install it to the oil pump body.

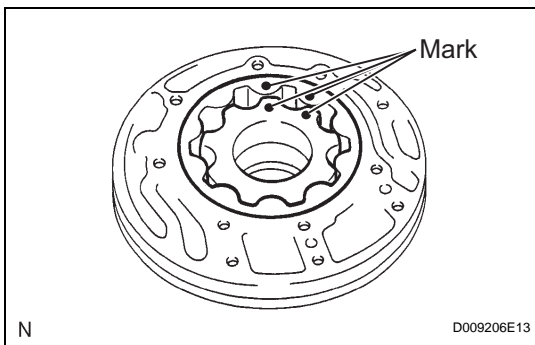
**NOTICE:**

- Make sure that the O-ring is not twisted or pinched.
- Apply enough ATF to the O-ring before installation.



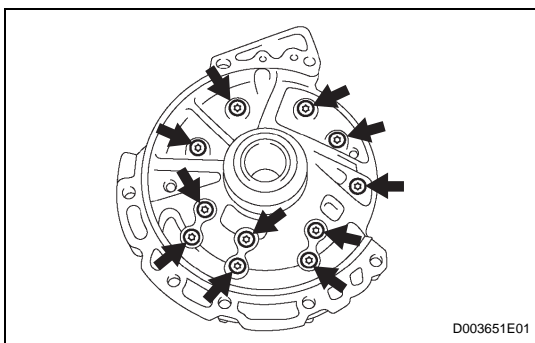
### 3. INSTALL FRONT OIL PUMP DRIVEN GEAR

- (a) Coat the front oil pump driven gear with ATF, and install it to the oil pump body with the marked side facing upward.



### 4. INSTALL FRONT OIL PUMP DRIVE GEAR

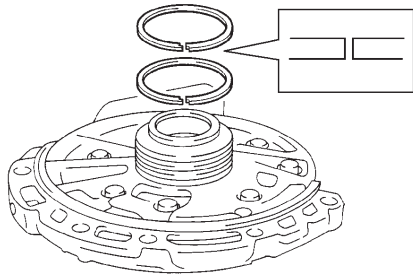
- (a) Coat the front oil pump drive gear with ATF, and install it to the oil pump body with the marked side facing upward.



### 5. INSTALL STATOR SHAFT ASSEMBLY

- (a) Set the stator shaft and align it with each bolt hole.
- (b) Using a T30 "torx" socket, install the 11 bolts.

**Torque: 9.8 N\*m (100 kgf\*cm, 87 in.\*lbf)**



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**6. INSTALL CLUTCH DRUM OIL SEAL RING**

- (a) Coat 2 new oil seal rings with ATF.
- (b) Install 2 new clutch drum oil seal rings.

**NOTICE:**

**Do not expand the ring ends excessively.**

**7. INSPECT OIL PUMP ASSEMBLY (See page [AX-247](#))**